

Chapter Nine

Transportation

Overview

Transportation is increasingly the most complex issue faced by State and local governments. The movement of people, goods and services is crucial to the economic and social vitality of any community. The transportation network in and around Westminster provides access for people and products to small local markets, as well as large metropolitan areas. The Westminster transportation system affords its residents the opportunity to work in the larger employment centers, while residing in a community that has an established high quality of life. However, as Westminster and Carroll County continue to grow, the pressures on the transportation network will continue to increase, and these increasing pressures will need to be addressed by the State, County and local governments.

Summary of the Existing Transportation Network

The Westminster area features a variety of modes of transportation. These include the road network, which encompasses State highway facilities, collector roads, and the local street system; pedestrian and bicycle facilities; railroads; the Carroll County Regional Airport; and transit and ridesharing opportunities. All of these facilities are described in detail below. In addition, information is provided regarding the traffic volumes and capacity of area roadways, as well as the level of service and functional classification.

Functional Classification

Functional classification is the assignment of streets and roadways into classes or systems, according to the type of service they are intended to provide based on its daily traffic volumes as well as its purpose, characteristics and location (Map 9.1, insert). Individual streets do not function independently. Rather, travel involves movement through a network of roadway systems. The functional classification defines the role that any particular street should fulfill in order to facilitate logical and efficient travel patterns. Basically, local roadway classifications represent an emphasis on access to property, arterials represent a high level of mobility, and collectors represent a compromise between property access and mobility.

Roadway segments are designated as rural or urban based on context and roadway characteristics. The roadway segments are then further classified into one of the following categories (only those categories relevant to the Westminster area are included here):

Principal Arterial: Links large population or employment centers; can range from expressways to two-lane roadways; inter-county or interstate oriented and indicative of long travel lengths; high in traffic volume and speeds; access should be limited to intersections with public streets and controlled by establishing distances between

points of access, provision of service or parallel roads, connections between adjacent developments, prevention of private/individual driveway connections, as well as the reduction in the number of existing access points.

Minor Arterial: Provide a lower level of mobility while placing more of an emphasis on land access than the other arterial classifications; typically provide a link to the collector roadway system and connect small population centers to the overall arterial system; access should be controlled by establishing distances between points of access, connections between adjacent developments; and prevention of private/individual driveway connections.

Collector: Provide for both land access and movement within residential, commercial, industrial or agricultural areas; links from the land uses to the arterials; provide service to areas not on an arterial route and to other important traffic generators; access should be controlled by establishing distances between points of access, connections between adjacent developments; and prevention of private/individual driveway connections.

Local System: Provide for direct access to individual land uses; discourage through traffic and are typically low in traffic volumes and speed.

(Source: Carroll County Functional Classification Criteria and Assignment, October 1995. Revised in accordance with current SHA classification system, June 2004.)

State Highway Facilities

The City of Westminster and the surrounding area are served by seven Maryland State Highways: MD 140 (Baltimore Boulevard and a segment of MD 97), MD 97 North (Littlestown Pike), MD 97 South (Washington Road), MD 27 (Westminster/Manchester Road, Railroad Avenue/Liberty Street and Ridge Road), MD 32 (Sykesville Road), MD 31 (New Windsor Road), Route 832 (Old Taneytown Road), Route 852 North (Old Manchester Road), and Route 852 south (Old New Windsor Road). Each of these facilities is briefly described below, beginning with the principal arterials and working down to the state highways, which are classified as local roads.

Maryland MD 140 is classified as a principal arterial under the State Highway Administration (SHA) system of functional classification. Eastbound MD 140 provides access from Westminster to Interstate 795, which joins the Baltimore Beltway (I-695); to the west, MD 140 intersects with U.S. Route 15 in Emmitsburg. This route serves commercial and commuter traffic between Carroll County, Pennsylvania, and the Baltimore area via I-795 and I-695. East of the Westminster corporate limits, MD 140 is a four lane, divided highway, with twelve-foot wide travel lanes and ten to twelve foot shoulders. The posted speed limit is 55 miles per hour to

the east of the City. Within the Westminster area, the speed limit decreases to 45 miles per hour, while the roadway width increases to provide for right and left turn lanes at intersections. West of MD 31, the width of MD 140 decreases to between forty-four and forty-eight feet, providing two twelve foot travel lanes with ten to twelve foot paved shoulders. The speed limit increases to 55 miles per hour in this area. Signalized intersections include Market Street, Malcolm Drive/MD 97, Gorsuch Road, Ralph Street, Center Street, Englar Road, Sullivan Road, MD 31 (partial), and WMC Drive. Interchanges with on- and off-ramps exist where MD Routes 27 and 97 North travel under MD 140.

Maryland MD 97 North, also classified by SHA as a principal arterial from MD 140 to Old Meadow Branch Road, connects MD 140 to Pennsylvania MD 97, serving Littlestown and Gettysburg and providing a connection to U.S. Route 15. The width of MD 97 North is forty feet, which offers two twelve foot travel lanes with ten foot left turn and acceleration/deceleration lanes at major intersections. There are no shoulders along most of the road, except in the section just north of the MD 140 interchange, where eight foot wide shoulders are available along the west side of the road. Signalized intersections include Commerce Center Drive and Airport Drive/Magna Way. The City's most significant industrial parks, as well as the Carroll County Airport, are located on MD 97 North. Considerable commuter and commercial traffic use this route to reach both local and regional employment and market centers. Currently, SHA is constructing a new bridge at the intersection with MD 97(N) and MD 140. This replacement bridge will not add capacity. However, it will function more efficiently as the ramps will be slightly realigned for the smoother transition of merging traffic.

Maryland MD 97 South, between MD 140 and MD 32, is classified as a principal arterial. This road continues south through Carroll County and into Howard and Montgomery Counties, intersecting with the Washington, D.C. beltway (I-495) and continuing into Washington, D.C. as New Hampshire Avenue. In Westminster, at its intersection with MD 140, the width of MD 97 South is approximately fifty feet. Northbound traffic is provided with two left turn lanes, a shared left and through lane, and one twelve foot, free flow right turn lane separated by an island. A four foot raised median separates north and south bound traffic, and curb and gutter is provided on both the east and west sides of the highway. The southbound direction has two twelve foot lanes with a free-flow right turn lane from eastbound MD 140. Between MD 140 and Main Street, MD 97 South has three twelve foot lanes in each direction separated by a four foot wide concrete median. To the south of Main Street, MD 97 is forty-four feet wide, providing two twelve foot travel lanes with ten foot paved shoulders.

Maryland MD 27, classified as a principal arterial by SHA (from Bond Street to Hahn Road), runs diagonally across the County, from Manchester to Mount Airy, where there is an interchange at I-70. This route then continues through Howard and Montgomery Counties to terminate at I-270. Maryland MD 27, both north and south of the Westminster corporate limits, is an undivided highway with two twelve foot travel lanes and stabilized shoulders that vary from zero to ten feet along the length of the road. In the City of Westminster and to the south of Green Street, MD 27 has two twelve foot travel lanes with parking permitted on the east side of the road. Between Green Street and South Alley, parking is permitted on the west side of the street, and from South Alley to Main Street, parking is restricted to provide turn lanes at the Main Street intersection. Signalized intersections include Green Street, Main Street, and Mall

Ring Road. An interchange exists where MD 27 crosses under MD 140. Currently, the State Highway Administration is reconstructing the bridge at MD 27 and MD 140. This project will add additional lane capacity to MD 140. The MD 27 Corridor has also been identified by the City of Westminster as the primary “Gateway” into downtown Westminster. Plans have been developed to provide mixed-use development opportunities along MD 27 near downtown. The City will also work with the State Highway Administration to provide limited on street parking opportunities where appropriate. The City will also work with SHA to determine an appropriate plan to restrict truck traffic on MD 27 through downtown Westminster.

Maryland MD 32 is classified by SHA as a minor arterial. This road offers a connection from Westminster to the Sykesville/Eldersburg area, and continues into Howard and Anne Arundel Counties, terminating at I-97. MD 32 provides access to U.S. 29, M.D. 100, I-70, U.S. 1, U.S. 50, U.S. 301, and I-97. Within the Westminster corporate limits, MD 32 is also known as Main Street (Washington Road south of the intersection with Manchester Avenue). Various segments of Main Street have been reconstructed by the State Highway Administration (SHA) and then turned over to the City. To date, the SHA has reconstructed and deeded to the City the section of MD 32 from the southern corporate limits on Washington Road through the downtown area as far as McDaniel College. The City now owns and maintains Main Street from MD 140 to Colonial Avenue. Main Street has two twelve foot travel lanes with parking permitted on both sides in most areas. Signalized intersections include Manchester Avenue, Center Street, Longwell Avenue, MD 27, John/Bond Street, Pennsylvania Avenue, and MD 31. Left turn lanes are provided at MD 27 and Manchester Avenue/Washington Road. South of Westminster, MD 32 has a thirty-two foot width, except where turn lanes are provided, resulting in two twelve foot travel lanes with a four foot shoulder area on each side.

Maryland MD 31, classified by SHA as a principal arterial, connects Westminster to New Windsor and continues west to terminate at Route 26 near Libertytown in Frederick County. In the Westminster area, MD 31 is a two lane, undivided roadway. The forty-four foot width provides two twelve foot travel lanes with ten foot stabilized shoulders.

Maryland Route 832 (Old Taneytown Road) runs just south of and parallel to MD 140, providing an alternate route between Westminster and Taneytown. The thirty-two foot width provides two eleven-foot travel lanes with approximately five-foot shoulders. It will be necessary to make upgrades to this road with the eventual development of the Roop’s Mill property.

Pennsylvania Avenue (City owned and maintained). The road connects West Main Street to MD 97 North at its juncture with MD 140. Pennsylvania Avenue has two twelve foot wide travel lanes with parking permitted on both sides of the street. The City will work with the residents and the State Highway Administration to determine an appropriate plan to install traffic calming devices through this primarily residential neighborhood.

Maryland Route 852 North (Old Manchester Road) offers a connection between Cranberry Road and MD 27. Maryland 852 continues north, parallel to MD 27, to a point north of Maryland Route 482. This route has two twelve foot travel lanes with approximately ten-foot shoulders.

Maryland Route 852 South (Old New Windsor Road) provides a connection between the Main Street/Uniontown Road intersection and the Wakefield Valley area. This road, which parallels Maryland MD 31, provides an alternate route to residents in the western portion of the City who have destinations in the downtown.

Collector and Local Roads

Collector roads are those roads that facilitate traffic flow between arterial highways, and local roads, such as subdivision streets. Collector roads are classified as major or minor in rural areas and are characterized by moderate speeds. The State Highway Administration makes no distinction between major and minor collectors in urban areas. Roads bearing some or all of the characteristics of a collector in the Westminster area include the Main Street portion of Maryland MD 32, Uniontown Road, Sullivan Road, Gorsuch Road, parts of Green Street, John/Bond Streets and Englar Road, Center Street, Market Street, Kate Wagner Road, part of Hook Road, and Old Westminster Pike. The portion of Center Street north of MD 140, and all of Market Street are four-lane roadways divided by a concrete median. Once complete, the reconstructed Meadow Branch Road will be a significant collector road between MD 97(N) and MD 140. This critical road will serve as a primary through movement for the MD 97 Industrial Corridor as well as the residential development occurring in the area.

Other roads designed and/or functioning similar to collectors in the Westminster area are Carroll Street, Monroe Street, Hahn Road, Sunshine Way, Meadow Branch Road, Old Bachman Valley Road, Lemon Road, Lucabaugh Mill Road, Royer Road, Stoner Avenue, 140 Village Road, Leidy Road, Gist Road, Poole Road, and the eastern part of Hook Road.

In general, these roads link residential areas with large commercial areas and provide travel routes to the other municipalities within the County. With the exception of Englar Road, which becomes a four-lane, divided highway for a short section to the north of MD 140, the collectors are two-lane, undivided roadways. Within the City limits, on-street parking is sometimes permitted along collector roads.

Outside the corporate limits of Westminster, major collectors have cross-section widths of between twenty-four and forty-four feet, generally providing two eleven to twelve foot wide travel lanes and two to ten foot wide stabilized shoulders. One significant exception is Englar Road, which has a width of eighty feet, providing four twelve foot travel lanes, a raised median, and ten foot paved shoulders. Other significant exceptions are a portion of Cranberry Road with a fifty-six foot width and four travel lanes, and Center Street between MD 140 and Malcolm Drive. Minor collectors in rural areas generally have a twenty-six foot cross-section, providing two eleven to twelve foot wide travel lanes and stabilized shoulders varying from zero to six feet.

The remaining streets in the City of Westminster are classified as local roads. This type of road provides direct access to individual parcels of land and is characterized by low speed limits, low traffic volumes, and the discouragement of through traffic. Most local roads have two lanes, are undivided, and frequently allow on-street parking; however, some local roads in Westminster, particularly those in the downtown area, provide only one-way traffic flow.

Traffic Volumes

Average daily traffic (ADT) figures are presented in Tables 9.1 and 9.2. Table 9.1 includes counts for significant State and City routes from 1999 and 2003. Table 9.1 also shows the percent change in ADT over those years. Data for Maryland MD 140 is shown in Table 9.2. Map 9.2 graphically displays the locations of the traffic count observation points, along with ADT figures from 2002.

**Table 9.1. Changes in Average Daily Traffic, 1999 – 2003
Significant State & City Routes in the Westminster Area**

Route	Common Name	Location	1999 ADT	2003 ADT	% Change
Municipal Routes					
MU 330	Main Street	.10 Mi North of Manchester Ave	12875	12475	-3.11%
		.20 Mi North of MD 27	14125	15775	11.68%
MU 75	Center Street	.10 Mi West of MD 140	9675	8525	-11.89%
MU 250	John Street	.10 Mi North of West Main St	8375	5825	-30.45%
MU 380	Monroe Street	.20 Mi East of Winters Alley	2625	2525	-3.81%
MU 434	Pennsylvania Ave	.40 Mi South of MD 140	8775	11025	25.64%
MU 470	Royer Road	.20 Mi South of MD 140	7875	5925	-24.76%
MU 624	WMC Drive	.10 Mi North of MD 31	3775	7075	87.42%
State Routes					
MD 27	Liberty Street	.20 Mi South of Main Street	10875	9650	-11.26%
	Railroad Avenue	.30 Mi South of MD 140	14775	13850	-6.26%
		.10 Mi North of MD 140	17475	22050	26.18%
MD 31	New Windsor Road	.70 Mi East of Medford Road	5075	8050	58.62%
		.30 Mi South of MD 140	11175	12350	10.51%
MD 97	Malcolm Drive	.10 Mi North of Old Westminster Pike	23975	30475	27.11%
	Littlestown Pike	.30 Mi North of MD 140	21575	24875	15.30%
		.10 Mi South of Pleasant Valley Road	17275	19975	15.63%

Source: Maryland State Highway Administration

Table 9.2. Changes in Average Daily Traffic, 1995 – 2002
Maryland MD 140 (Baltimore Blvd), Westminster Area

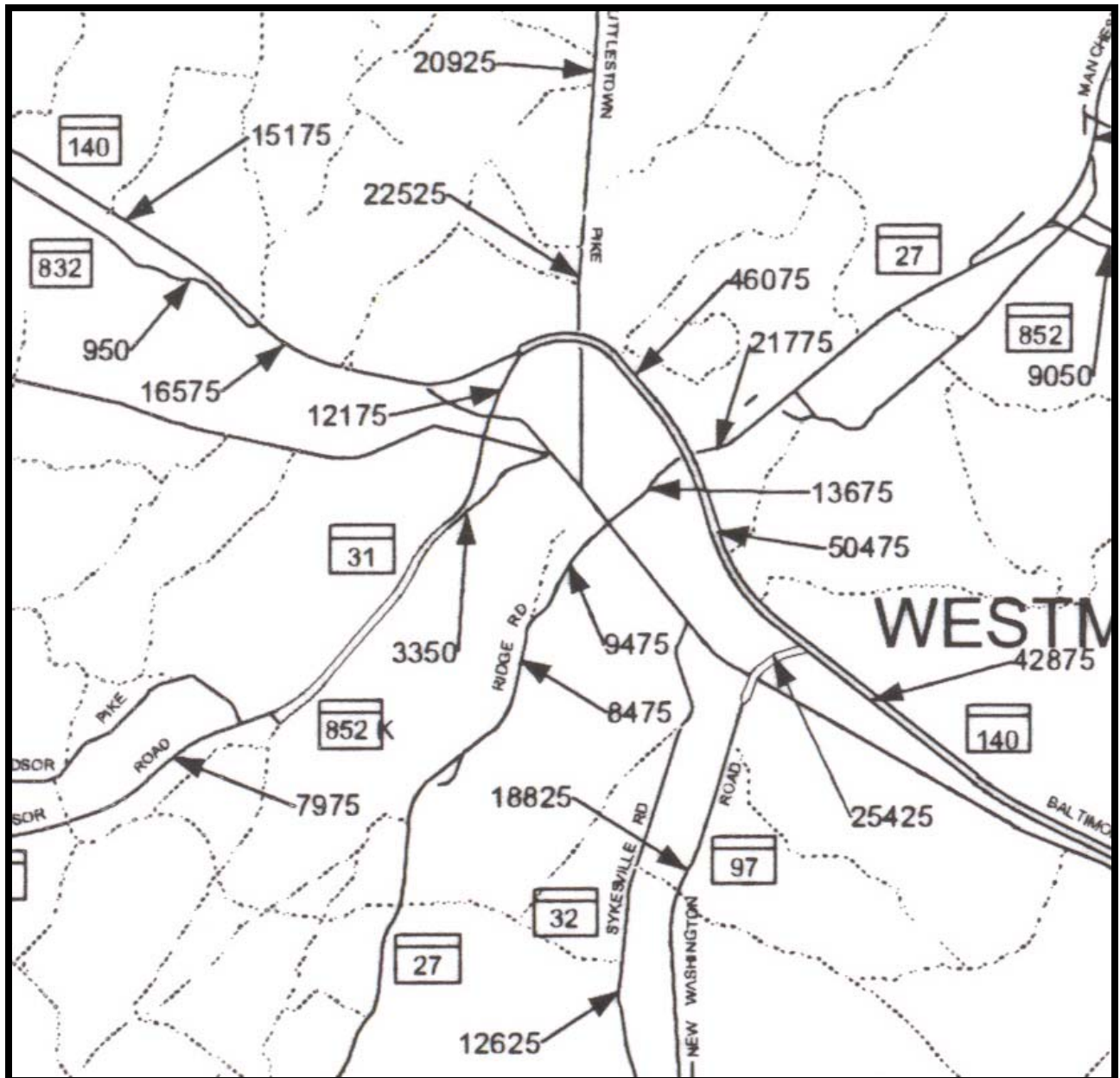
MD 140 (Baltimore Blvd)	1995 ADT	2002 ADT	% Change
Westminster western corporate boundary	14175	16575	16.93%
Vicinity of Sullivan Road	Not available	46075	--
Vicinity of Center Street	47650	50475	5.93%
East of MD 97 (South)	38900	42875	10.22%

Source: Maryland State Highway Administration

Two distinct trends emerge from the average daily traffic data. Traffic levels in the older sections of Westminster generally remained constant or dropped from 1999 to 2003. A notable exception is Pennsylvania Avenue, which experienced a 25% increase in traffic. The 89% increase on WMC Drive was largely due to the development of a shopping center and the reconstruction of the road's connection to MD 140. The overall lack of a substantial increase in traffic volumes of these older City roadways suggests that this portion of the road network will require few large-scale capacity improvements in the near future. Significant infill development, particularly in the downtown area, would likely increase the ADT figures for downtown and may warrant capacity improvements.

Traffic levels on roads serving the more recently developed portions of Westminster increased at varying rates. MD 31, MD 27, and MD 97 all show increases over the four-year span. In addition, traffic volumes on MD 140, the City's primary arterial, increased at rates between 10% and 17% depending on the location. These increases underscore the need to plan for greater capacity on existing roadways as well as the construction of new roadways in the developing portions of Westminster.

Map 9.2. SHA Traffic Count Observation Points with 2002 Traffic Volumes Westminster Vicinity



Source: Maryland State Highway Administration
via Carroll County Department of Economic Development

Capacity Analysis

The average daily traffic figures presented in Table 9.1, Table 9.2, and Map 9.2 define trends in traffic patterns, but provide little information about the impacts on the operation of the highway network. Capacity analysis is a procedure that can estimate the number of vehicles per hour that can use a particular road section or pass through an intersection before congestion is experienced and/or safety problems result.

The capacity analysis procedure takes into consideration the number of lanes, lane width, topography, and, if applicable, the amount of green-signal time allocated to each approach vector. This procedure was used to measure the current operation of intersections on Maryland MD 140, as the route carries the largest volume of traffic in and through Westminster. Road segments may also be studied; however, conditions at intersections usually deteriorate prior to road segments.

Capacity analysis is then used to determine the level of service (LOS) of a roadway. Level of service defines and describes the level of congestion experienced by motorists. LOS is a qualitative measure expressed as a grade letter. The designations range from 'A' to 'F,' with 'A' representing the least restricted flow and 'F' representing failure of the intersection. Once identified, intersections operating at low levels of service may be targeted for improvements or new roadways may be planned to relieve congestion in the area. Brief descriptions of the typical conditions associated with each level appear below.

Level of Service Descriptions

<u>LOS 'A'</u>	Traffic flows freely. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent. Turning movements are easily made.
<u>LOS 'B'</u>	Upper range of stable operation, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver in the traffic stream from LOS 'A.' The level of comfort and convenience provided is somewhat less than at LOS 'A' because the presence of others begins to affect individual behavior.
<u>LOS 'C'</u>	Mid range of stable flow, but is the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream, but not objectionably so. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. Back-ups may develop behind turning vehicles. The general level of comfort and convenience declines noticeably at this level. Levels of service of 'C' or higher are preferred within the City limits.

- LOS 'D' High density, but stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level. Delays to approaching vehicles may be substantial during peak hours. This level is the minimum degree of service acceptable in the City limits.
- LOS 'E' Unacceptable, operations are at capacity. All speeds are reduced to a low but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to 'give way' to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable as small increases in flow or minor disruptions within the traffic stream will cause breakdown. The service at this level and below is inadequate.
- LOS 'F' Unacceptable, forced or breakdown of flow; represents jammed conditions because capacity is exceeded. The amount of traffic approaching cannot be accommodated. This level of service is 'failing.'

A majority of the intersections along MD 140 currently operate at Levels of Service 'A' through 'D' during the peak hours of demand. The MD 140 / Market Street intersection operates at a LOS 'E' during PM peak hours. The section of this chapter entitled 'Corridor Studies' examines the impact of the existing levels of service on current and future development of the Westminster area, and discusses alternatives to mitigate projected future demand on the corridor.

Pedestrian Travel

An extensive pedestrian system in the City of Westminster gives City residents and employees the opportunity to walk to businesses, civic functions, and cultural events instead of driving. Most City streets are lined with sidewalks, and the City's recreational parks often include pedestrian walkways as well. The streets within the Westminster corporate limits that do not have sidewalks are usually the alleys that experience low vehicular traffic, thus safe pedestrian travel is still available.

Even with the extensive sidewalk system within the City, there are several intersections that are difficult for pedestrians to navigate. These include the intersections of East Main Street with Washington Road and West Main Street with Pennsylvania Avenue. All of these intersections are characterized by fairly fast moving traffic, wider than usual crossings due to a skewed approach of the intersecting streets, a lack of pedestrian signals, and insufficient or nonexistent crosswalks. The City and SHA continue to explore methods to make these intersections safer.

In addition to the intersections mentioned above, Maryland Routes 31 and 140 essentially act as barriers between the older parts of the City, also known as downtown, and the more

recently built outlying areas. Although pedestrians do occasionally cross these state highways, doing so is dangerous due to high-speed traffic and multiple vehicular lanes. As part of the project planning for the improvements to MD 140, the State Highway Administration is considering alternatives to provide better pedestrian access along and across MD 140. In that regard, all possible solutions for expansion include a pedestrian element.

Another problem with the pedestrian system is a lack of sidewalks or other pedestrian facilities on the outside edge of the City limits, as well as connections to major activity centers such as the Town Mall of Westminster, the County's regional mall. Sidewalk links are needed along many Carroll County roads that become City streets once they enter the corporate limits, such as Bond Street and the South Center Street and Gist Road area. Sidewalks are also needed along some of the Maryland State Highway Administration facilities, such as Liberty Street/Railroad Avenue (Maryland MD 27).

The Maryland State Highway Administration offers matching funds for installation of sidewalks along existing state highways where there is significant pedestrian use. A project in the Westminster area identified for possible sidewalk funding is along MD 27 from the termination of the existing sidewalk at the Westminster City limits north to connect to the Hahn Road and Cranberry Mall. Since this project is located outside of the City in the unincorporated area of the County, the decision to construct the sidewalk and provide matching funds belongs to Carroll County. Within the City limits, newly constructed roads are required by regulation to contain sidewalks.

Pedestrians are also present along Maryland MD 140. The provision of sidewalks along this highway needs to be assessed. Speeds along MD 140 are not conducive to creating a pedestrian environment, and sidewalks offer the impression of a safe haven for pedestrians, which may not be the case along this highway. However, this factor must be weighed against the need for pedestrian access. Regardless of whether sidewalks are installed, current pedestrian use clearly indicates the need for pedestrian crossings at the major intersections, particularly at Englar Road and Center Street. The future provision of sidewalks along the highway is under study in connection with the MD 140 Improvements Study. The overall project is being designed and implemented to increase the capacity and efficiency of the existing road because the Westminster By-pass was eliminated from the State of Maryland Consolidated Transportation Plan in 1999. The City will continue to seek engineering assistance from SHA to determine the need for additional traffic control devices for pedestrians at these locations.

Bicycle Travel

The ease and safety of bicycling varies throughout the City of Westminster. In general, the streets with low traffic volumes are typically narrow with little or no shoulder area, creating a greater potential for bicycle and vehicular conflicts. The roads that do have wide shoulders are characterized by heavy volumes of high-speed traffic that increase the danger to bicyclists. In addition, there are no designated bicycle lanes along any of the roads in the Westminster area.

The Carroll County Office of Tourism has published a set of maps depicting recreational bicycle tours in the County, two of which pass through Westminster. The first bicycle route

makes a 27-mile loop to the north of the City and travels along Pennsylvania Avenue and West Main Street to end at Westminster Elementary School. The second, 15-mile tour begins and ends at Westminster High School and involves biking on East Main Street and South Center Street past the Carroll County Farm Museum.

The State Highway Administration has recently designated a regional bike loop connecting Westminster, Taneytown, and Frederick. Within the City, the route follows MD 27 north, turns west on Main Street, continues along WMC Drive, and exits the City Limits on MD 140 west towards Taneytown. Signs directing cyclists along the route are scheduled to be installed at intersections during the summer of 2004.

The provision of bike racks encourages people to use modes of transportation other than the automobile. There are two City-owned bike racks in Westminster, located in the Gehr Lot at the intersection of Liberty and Main Streets and at the Westminster Municipal Pool. New developments in the City's 'N-C' Neighborhood Commercial zone are required to provide bicycle parking as a condition of site plan approval.

Greenways

Greenways are typically recreation areas with marked pathways for pedestrians and bicyclists that are deliberately separated from vehicular traffic. Greenways provide links between residential, recreational, and commercial uses, and are used for both recreation and transportation purposes.

The Wakefield Valley Community Trail, the first greenway trail in Westminster, begins at Old New Windsor Road and travels northeast to Uniontown Road, roughly paralleling Maryland MD 31. The approximately three mile trail will provide Wakefield Valley residents with pedestrian and bicycle access to the Avondale Run Community Center in the Ridgeview Chase Apartment complex, the Fenby Farm Quarry and Lime Kiln Park, a bird and wildlife observation area, a basketball court, the Uniontown Road Athletic Field, and a commercial area planned at the intersection of Maryland MD 31 and Tahoma Farm Road.

The first phase of the Wakefield Valley Community Trail that was developed is Phase II-A which is located entirely on City of Westminster open space land. Plans and specifications for Phase II-B have been submitted for review and funding to the State of Maryland under the Transportation Enhancement Program. Once complete, the entire Phase II trail will begin at Long Valley Road and travel northeast to Windsor Drive, as shown on the Comprehensive Land Use Plan map. Phase I will connect Long Valley Road to Congressional Drive, traversing the open space land between Sawgrass Court and South Burning Tree Drive in the Avondale Run Community. Phase III was constructed when the property at the corner of Uniontown Road and Maryland MD 31 was developed. Phase III is the link between Windsor Drive and the Uniontown Road Athletic Field.

When completed, the trail will be dedicated as the Terrence Burk Memorial Trail, in memory of a local businessman and community leader who was fatally injured while jogging on Maryland MD 97. In the proposed transportation element of the Westminster and Environs

Comprehensive Plan, Carroll County has designated certain areas for the construction of greenway trails. In that regard, this trail system will tie together existing pedestrian areas and provide an opportunity for greater pedestrian access in and around Westminster.

Railroads – Maryland Midland Railroad

Based in Union Bridge, the Maryland Midland Railway provides freight rail service to central Carroll County. This line heads northwest to Thurmont and into Hagerstown where it connects with CSX Railroad in Pennsylvania. From Keymar in Carroll County, the track runs northeast through Taneytown, southwest into Walkersville in Frederick County, and east through New Windsor and Westminster. The rail then heads southeast through Finksburg, and continues through Baltimore County into Baltimore City, rejoining CSX near South Baltimore's harbor and ports. Westminster hosts one of two intermodal transfer stations operated by the rail line. According to Maryland Midland Railway, the company currently services four commercial clients in Westminster. Overall, the company transported over 9,000 carloads of business on its trains in FY 2003.

Airports – Carroll County Regional Airport / Jack Poage Field

Begun originally as the Westminster Airport with two turf landing strips, the Carroll County Regional Airport is located on the north side of the City of Westminster, off of Maryland MD 97. The initial owner and operator was the Shriver Packing Company. By 1969, there were about 22 based aircraft and approximately 7,500 annual operations according to the FAA.

The County acquired the airport in 1976. Three parcels of land were purchased in 1977 for future use. A 2,930 foot by 40 foot paved runway was constructed in the fall of 1977. The following year the main hangar, which presently contains the administrative offices, and the first T-hangar were constructed with local funds. Runway lighting was installed in 1978. A parallel taxiway was paved and the runway was extended 300 feet in the fall of 1979. Both were widened in the early 1980s.

Now known as the Carroll County Regional Airport, the facility is designated as a General Utility-State II Airport, which means it serves aircraft with approach speeds of less than 121 knots and wingspans of less than 79 feet, essentially the size of small planes and corporate jets. The airport has been upgraded through the construction of a 5,100 foot runway. The old runway was extended and functions as a parallel taxiway. The terminal area consists of a maintenance hangar, operations center, classroom area, and seven 10,000 square foot corporate hangars with adjoining office space. The facility has an instrument approach with a final approach fix. Jet "A" fuel is currently available, as well as 100 Octane LL. There are currently 128 aircraft based at the airport, including thirteen multi-engine planes and three jets.

The FAA anticipates initiating an update of the layout plan for the Carroll County Regional Airport in the spring of 2004 that will guide development of the site for the next twenty years.

Park and Ride Lots

Park and ride lots are intended for commuters who transfer from their own vehicles to alternative means of transportation, such as carpools or vanpools. There are seven park and ride lots located in Carroll County, with one in the Westminster area located at the intersection of MD Routes 97 and 32. This lot offers parking for 101 automobiles with approximately 15% of the spaces occupied on average. Handicapped parking is provided along with lighting and a telephone. All of Carroll County's park and ride facilities are state owned, with the exception of the Sandymount lot, which is owned by the County. Table 9.3 lists the locations of the Park and Ride lots serving Carroll County.

Table 9.3. Park and Ride Lots in Carroll County

Location	Adjacent Roadways
Manchester	MD 27 & MD Route 30
Sandymount	Old Westminster Pike & Green Mill Road
Westminster	MD 97 & MD 32
Dorsey Crossroads	MD 97 & MD Route 26
Eldersburg	MD 32 & MD Route 26
Sykesville	MD 32 & MD Route 851
Mt. Airy	MD 27, North of Interstate 70

Source: Carroll County Government

Ridesharing Opportunities

The Maryland Mass Transit Administration (MTA) has developed a free ride-matching service. This program has been designed to assist residents and employees with their commute to and from work by offering alternatives to driving alone. Currently, the primary focus is placed on carpooling and vanpooling.

Through an "on-line" computer service, applicants are placed into a database and matched with commuters having the same criteria. The MTA shares information about Carroll County with other counties through the Washington Metropolitan Council of Governments' Commuter Connections network. This cooperative effort increases a person's chances of finding a successful match. As of the end of 2003, there were 98 Carroll County residents registered in the Commuter Connections database. This is less than half the number (225) registered at the end of 1998.

The benefits of ridesharing are numerous. Not only does it help alleviate traffic congestion, it translates into both an economical and environmental savings by reducing the accumulation of miles traveled on an individual's car and reducing pollution.

Local Paratransit Opportunities – Carroll Transit

The *Carroll Transit System* began in 1972 as the Carroll County Senior Overland Service and was started by the Carroll County Bureau of Aging. In 1988 Carroll Transit became a private, non-profit corporation with a primary mission of providing available, efficient, safe, and demand-responsive transportation to older adults, persons with disabilities, emotionally disadvantaged, and transportation disadvantaged citizens of Carroll County.

The system operates Monday through Friday from 7 a.m. to 5 p.m. Sunday service is provided in the Westminster area on a limited basis for individuals needing transportation to churches in the Westminster area. Persons requiring transportation are requested to call 24 hours in advance to schedule their rides. Riders will normally share a vehicle with other passengers coming from the same general area, going in the same direction. Every attempt is made to accommodate passengers calling for same-day pick-up.

In January of 2003, the trade name was changed to Carroll Area Transit System (CATS). The change was made to improve vehicle recognition, improve public awareness, and for greater marketing opportunities. The public response has far exceeded expectations, with many positive comments and an increase in businesses purchasing advertising space on fleet vehicles. CATS expanded service with the name change, now offering a deviated fixed-route shopper shuttle.

CATS currently has a fleet of 30 vehicles. On many days all 30 vehicles are scheduled to serve a growing user population. Eighteen of these vehicles (60%) are lift equipped providing 37 wheelchair positions. The service currently transports an average of over 12,453 one-way trips per month. In 2002, CATS made 149,438 one-way trips, an increase of 31% from the previous year. Based on the population growth in Carroll County these numbers are expected to continue to grow. The vehicles range in size from 7-passenger minivans to small buses with 23 seats.

Transportation is provided to all five Carroll County Senior Centers and the Westminster Supper Club. The demand-response transportation is available to seniors and our disabled population on a primary-service basis and to the general population on a space-available basis. Demand-response service provides door-to-door service for all passengers. This agency provides coordinated service to and for 13 service agencies and 12 service providers in Carroll County.

CATS provides transportation to medical appointments for nursing home residents and serves two dialysis clinics, one in Carroll County and one in Baltimore County. The fare for individuals going to a dialysis center is reduced. At least one vehicle goes into Baltimore City everyday, transporting passengers to hospitals and medical facilities. Transportation is also provided for the impaired to physical therapy and counseling facilities such as the YMCA, Health Department and various clinics, and educational and training facilities such as McDaniel College and Carroll Community College. Business Employment Resource Center (BERC), clients are picked up at their home, transported to daycare facilities (if necessary) and then to the training or job site; at the end of the day this process is reversed. CATS transports many individuals to and from their place of employment allowing them to become productive citizens of Carroll County.

Taxicab and Charter Bus Service

There are several taxi-cab companies that operate in the City, as well as charter bus services available throughout the County. These companies include Yellow Transportation, County-wide Taxi and Transportation Service, Bill Rohrbaugh's Charter Service, Inc., and Rill's Bus Service.

Local Bus Service and Intermodal Connections

The need for additional public transportation options in Westminster has been explored through two recent planning initiatives. In the summer of 2002, a committee of residents, City and State officials, business owners, and other stakeholders associated with the Pennsylvania Avenue neighborhood recommended a set of policy actions to improve their community. Among other recommendations, the committee advocated the creation of a local bus route between their downtown neighborhood and employment and shopping opportunities in outlying areas of the City. Such a route would allow residents without a car to access the industrial area north of MD 140 for work and the retail areas east of MD 27 for shopping needs. Currently, residents working or shopping in these areas must travel these major thoroughfares as pedestrians or rely on taxi service.

The Maryland MD 27 Corridor Study, completed in the Fall of 2002, recognized the need for a centrally located intermodal transfer station to move residents, visitors, and employees from car to sidewalk to motorized public transportation. The study found that a transit center located downtown could support retail development which could serve commuter and resident needs, in addition to providing improved employee access to downtown jobs. A local shuttle service based at the transit station could also expand tourism opportunities, as visitors are able to cover more ground in less time and with less effort. A combination of these two recommendations would substantially enhance access between retail centers, employment opportunities, and residential neighborhoods in the City of Westminster.

Commuting Patterns

According to the 2000 U.S. Census, over 30% of the residents in Westminster spent less than 15 minutes traveling to work, while 28% of City residents spent 45 minutes or more in travel time to work (Table 9.4). This latter percentage represents an 8% increase from 1990, and is reflective of a regional trend of lengthening commutes. Travel time to work for residents in the County as a whole shows a similar pattern, with 31.5% of the County labor force commuting for 45 minutes or more each day (Table 9.5). The number of people working at home rose from 1.4% to 2.1% from 1990 to 2000, and is expected to continue to gradually increase due to technological advances in telecommunications.

Table 9.4. Travel Time to Work for City of Westminster Residents, Workers 16 Years and Older, 2000

Travel Time to Work	Number of Workers	Percent
<i>Did not work at home:</i>	<i>7,375</i>	<i>97.9</i>
Less than 5 minutes	267	3.5
5 to 9 minutes	1,041	13.8
10 to 14 minutes	1,140	15.1
15 to 19 minutes	785	10.4
20 to 24 minutes	574	7.6
25 to 29 minutes	302	4.0
30 to 34 minutes	560	7.4
35 to 39 minutes	116	1.5
40 to 44 minutes	448	5.9
45 to 59 minutes	1,065	14.1
60 to 89 minutes	867	11.5
90 or more minutes	210	2.8
<i>Worked at home</i>	<i>158</i>	<i>2.1</i>
TOTAL	7533	100.0

Source: U.S. Census, 2000

Table 9.5. Travel Time to Work for Carroll County Residents, Workers 16 Years and Older, 2000

Travel Time to Work	Number of Workers	Percent
<i>Did not work at home:</i>	<i>74,595</i>	<i>96.1</i>
Less than 5 minutes	1,871	2.4
5 to 9 minutes	5,039	6.5
10 to 14 minutes	7,114	9.2
15 to 19 minutes	7,675	9.9
20 to 24 minutes	7,478	9.6
25 to 29 minutes	3,647	4.7
30 to 34 minutes	8,669	11.2
35 to 39 minutes	3,731	4.8
40 to 44 minutes	4,975	6.4
45 to 59 minutes	12,480	16.1
60 to 89 minutes	9,377	12.1
90 or more minutes	2,539	3.3
<i>Worked at home</i>	<i>2,997</i>	<i>3.9</i>
TOTAL	77592	100.0

Source: U.S. Census, 2000

The majority of persons commuting to work in 2000 traveled in cars, trucks, or vans (Table 9.6). Nearly 80% of the City's labor force drove alone to work, while 11% carpooled. These figures represent a shift of 4% from carpools to driving alone from 1990 to 2000. The next highest category for transportation mode to work was 'walked' with 5.1% of the labor force, down from 6.8% in 1990. Only 1.7% of the 2000 labor force in Westminster used some sort of public transportation to travel to work.

Table 9.6. Means of Transportation to Work for City of Westminster Residents, Workers 16 Years and older, 2000

Mode of Transportation	Number of Workers	Percent
<i>Car, truck, or van:</i>	<i>6,804</i>	<i>90.3</i>
Drove alone	5,977	79.3
Carpooled	827	11.0
<i>Public transportation:</i>	<i>125</i>	<i>1.7</i>
Bus or trolley bus	45	0.6
Streetcar or trolley car	0	0.0
Subway or elevated train	55	0.7
Railroad	0	0.0
Ferryboat	14	0.2
Taxicab	11	0.1
<i>Motorcycle</i>	<i>25</i>	<i>0.3</i>
<i>Bicycle</i>	<i>13</i>	<i>0.2</i>
<i>Walked</i>	<i>387</i>	<i>5.1</i>
<i>Other means</i>	<i>21</i>	<i>0.3</i>
<i>Worked at home</i>	<i>158</i>	<i>2.1</i>
TOTAL	7533	100.0

Source: U.S. Census, 2000

The increasing proportion of workers driving and driving alone, in combination with population increases countywide, has contributed to the poor levels of service on major arterial roadways identified in this chapter. Table 9.7 reveals that a majority of workers living in Carroll County work outside of the County, further contributing to peak hour congestion. Map 9.3 graphically illustrates the distribution of Carroll County residents who work outside of the County.

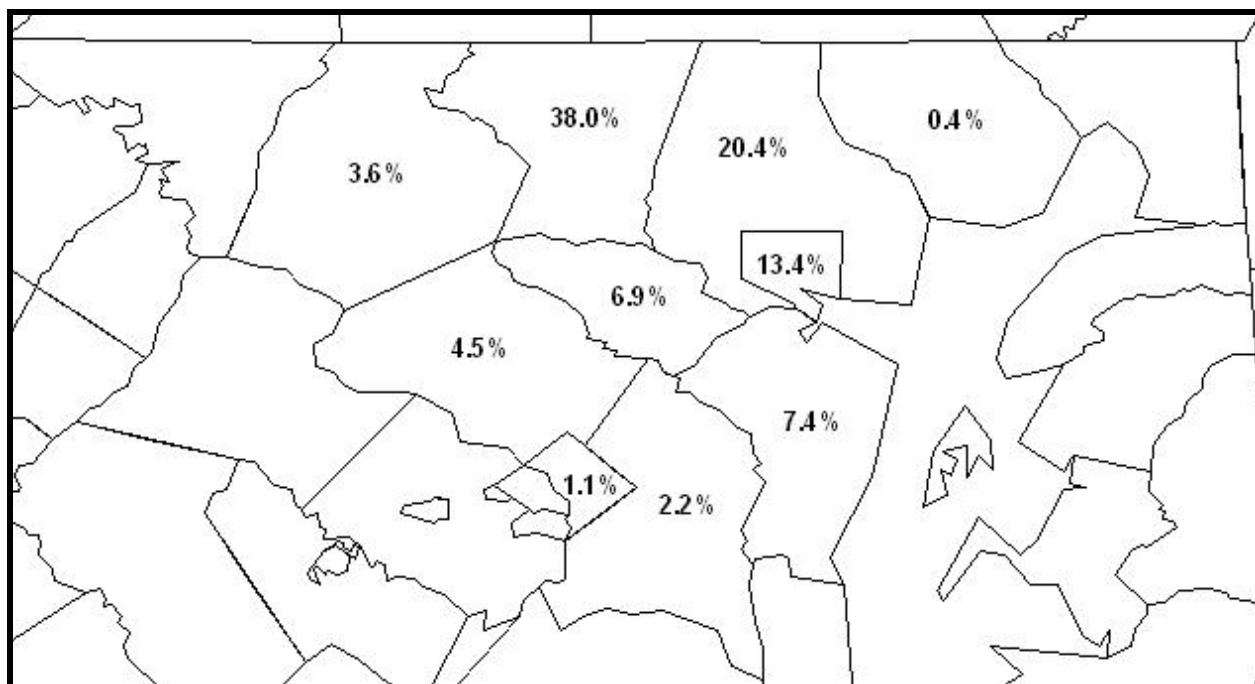
Table 9.7. County of Employment for Carroll County Residents, 2002

County of Employment	Number of Commuters	Percent
<i>Maryland</i>	706	96.8
Anne Arundel	54	7.4
Baltimore City	98	13.4
Baltimore County	149	20.4
Carroll	277	38.0
Frederick	26	3.6
Harford	3	0.4
Howard	50	6.9
Montgomery	33	4.5
Prince George's	16	2.2
<i>Pennsylvania</i>	8	1.1
<i>Virginia</i>	7	1.0
<i>Washington, D.C.</i>	8	1.1
TOTAL	729	100.0

* Sample Data

Source: Carroll County Commuter Survey

Carroll County Department of Economic Development, 2002

Map 9.3. County of Employment for Carroll County Residents, 2002

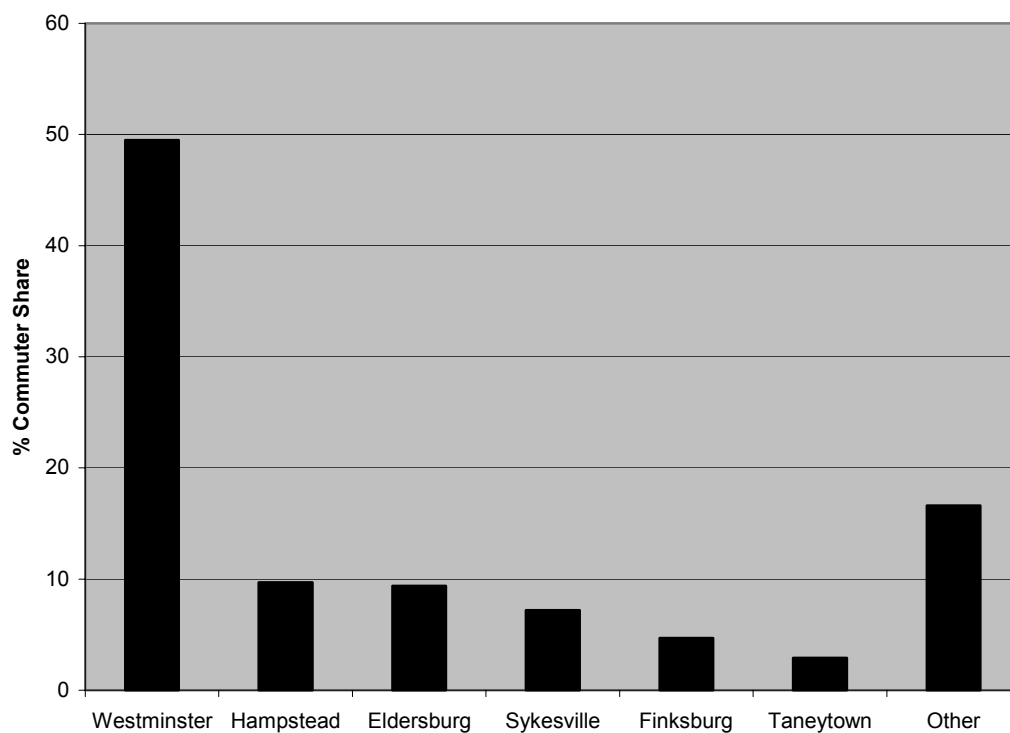
Source: Carroll County Commuter Survey

Carroll County Department of Economic Development, 2002

Of those who live and commute to a job in Carroll County, just less than half work in the Westminster area (Table 9.8). The high proportion of County employers in and around the City, while a positive indicator for economic development efforts, complicate peak hour travel patterns with a significant number of commuters entering the corporate limits at the same time as many City residents are leaving for other jurisdictions. The increases in average daily traffic on the state routes serving Westminster's employment centers have quantified this challenge.

Table 9.8. Destination of Workers Commuting Within Carroll County, 2002

Location of Employment	Percentage of Commuters
Westminster	49.5
Hampstead	9.7
Eldersburg	9.4
Sykesville	7.2
Finksburg	4.7
Taneytown	2.9
Other	16.6



Source: Carroll County Commuter Survey (Sample Data)
Carroll County Department of Economic Development, 2002

As the number of commuters working and living in separate jurisdictions continues to increase, the provision of increased vehicular capacity and alternative means of transportation will need to be addressed. Commuting patterns indicate that the state routes in and around Westminster are particularly at risk for further congestion and decreased levels of service. Interjurisdictional coordination will be essential to the success of planning efforts to mitigate future impacts of increased capacity demand on the transportation system in the Westminster area.

Corridor Studies - MD 140

The City of Westminster and the surrounding area are served by two primary east-west corridors: Maryland MD 140 (Baltimore Boulevard and Taneytown Pike) and Maryland MD 32 (Main Street). These two corridors were studied in depth during this update of the *City of Westminster Comprehensive Plan* because of their significance with respect to commercial activity, as well as the flow of goods, materials, and people into, out of, and through the Westminster area.

The Westminster portion of MD 140 functions in many ways as the core business area for much of Carroll County. Included in the MD 140 corridor are numerous shopping, dining, and entertainment opportunities. The highest concentration of goods and services available to Carroll County residents is also located along this highway.

In addition to its commercial character, the MD 140 corridor provides access to the Baltimore regional markets via connections to I-795 and I-695. Goods and materials shipped from Pennsylvania and Baltimore, as well as commuters traveling to places of employment, use this important transportation link.

The Maryland Department of Transportation and the State Highway Administration proposed a four-phase approach to increasing capacity along MD 140. During the 1998 Comprehensive Plan, the State of Maryland was prepared to construct the Westminster By-pass which would alleviate much of the pressure on MD Routes 140 and 97. However, in 1999, the State of Maryland removed the proposed Westminster By-pass from the Consolidated Transportation Plan because its construction was not in compliance with the principles of *Smart Growth*.

As a result of that action, the State of Maryland initiated project planning for MD 140 from Market Street to Sullivan Road to provide extensive capacity improvements to it. To date, the planning process is still underway and the State Highway Administration has not determined which option is most suitable for MD 140. The proposed alternatives range from no build to diamond interchanges at Malcolm Drive, Center Street and Englar Road.

The four proposed alternatives recommended for detailed study by SHA are:

Alternate 1 – No Build

No major improvements are proposed under Alternate 1, the No-build Alternate. Minor short-term improvements would occur as part of normal maintenance and safety projects.

Alternate 2 – Transportation System Management/Travel Demand Management(TSM/TDM) with Widening

The TSM/TDM Alternate consists of a series of modest improvements throughout the corridor to address the areas with greatest need at specific locations or segments of the roadway. TSM/TDM improvements generally could be constructed with relatively low costs and impacts. The most extensive intersection improvements included in the TSM/TDM Alternate would take place at the Center Street and Malcolm Drive intersections, identified as the most congested in the corridor. Minor intersection improvements have also been identified for Englar Road. TSM features through the corridor include signal timing and signal optimization, and access consolidation at properties with multiple access points on MD 140. The alternate also includes widening the outside lanes in each direction to 16 feet to accommodate on road bicyclists, and a five-foot sidewalk and improved pedestrian crossings throughout the project limits. TDM measures include the consideration of transit improvements such as shuttle/commuter bus services, park and ride lots, Intelligent Transportation System (ITS) measures, staggered or flexible work hours programs and telecommuting centers, wherever applicable.

Alternate 5 – Single Point Urban Diamond Interchanges (SPUDI)

The SPUDI alternate is similar to alternate 4, but includes SPUDI configurations at Englar Road, Center Street and Malcolm Drive. While similar to traditional diamond interchanges, SPUDI ramps curve inward and meet at a single traffic signal on the bridge, allowing opposing left turning movements to occur simultaneously. The other features of this alternate, including interchange ramps, pedestrian and bicycle features, service roads, and number of through lanes, are similar to those proposed for alternate four. Alternate four has since been dropped from the study.

Alternate 6 – Half Bridge Alternate

The half bridge alternate is also a modification of a full grade-separated intersection. However, only the westbound through lanes of MD 140 would be carried under Malcolm Drive and Center Street, while the eastbound lanes would remain at-grade with the existing intersection. At the Englar Road interchange, MD 140 eastbound through lanes would be carried under Englar Road, while the westbound lanes would be kept at existing grade. Between Center Street and Malcolm Drive, an at-grade westbound service road has been included to provide access to the MD 27 interchange and existing businesses.

This alternate would also include a 16-foot wide outside curb lane for on-road bicyclists, five-foot side walks and improved pedestrian crossings.

Phase I and II improvements to MD 140 included the widening of the corridor through Westminster. These improvements were completed in 1998. Phase III involves the reconstruction and widening of the bridges over MD 27 and MD 97. This reconstruction project started during the fall of 2003. These improvements are anticipated to be completed in 2005. Phase IV of the improvements was originally developed under the assumption that the Westminster Bypass would be constructed. Once the bypass was removed from consideration, Phase IV improvement had to be reconsidered to accommodate future traffic without the bypass. The proposed widening of MD 140 with the possible use of interchanges to assist in traffic movement has added complexity to this issue. Because of the extent of these improvements, many businesses along MD 140 could be impacted and forced to relocated depending on the scope of the improvements.

To obtain additional input from the community, the SHA commissioned an advisory task force of government officials, business representatives and local residents to help determine what level of improvements would ensure that MD 140 continues to function in an efficient manner while being sensitive to the needs of the local community. Also, The Mayor and Common Council and the Board of County Commissioners of Carroll County met in March of 2004 to formulate a unified opinion as to what improvements those entities prefer. These long-term improvements are not imminent; yet it is necessary to have an overall plan for these improvements, as they will require extensive engineering, right-of-way acquisition, as well as massive reconstruction.

Another issue in the Maryland MD 140 corridor is access control. The State Highway Administration manages access control for MD 140. The continued implementation of this plan is crucial to ensure the continued efficient movement of traffic on MD 140 outside of Westminster's corporate limits. Access management has been partially addressed within the Westminster corporate limits, in part by the construction of Market Street for use as a parallel collector road to commercial properties. The Westminster and Environs Transportation Element further enhances this effort, as it will provide alternative local roads to be used as alternatives to State roads.

Corridor Studies – Main Street

The Main Street corridor provides a totally different character. Whereas Maryland MD 140 is oriented for individual motorized vehicles, the historic Main Street of downtown Westminster is less automobile oriented and more focused toward pedestrians. Many of the historic buildings contain shops, offices, and services. The tree-lined street and wide sidewalks encourage pedestrian movement.

Parking in the Main Street area is of particular concern to both merchants and potential customers. On-street parking is available in many locations, and public parking lots are located at major intersections and to the rear of the commercial buildings along the first block of East Main Street. The City has established consistent rates at all of its parking meters. In addition,

there is no charge to park at a meter on weekends, holidays, and after 5:00 p.m. on weekdays. To further address parking concerns, the City constructed two parking garages which were opened in September 2003. The Longwell Avenue Municipal Parking Garage, located at the intersection of Longwell Avenue and Distillery Drive, is a 296 space parking garage which is open to monthly permit holders, as well as hourly users. The Westminster Square Municipal Parking Garage, located on Green Street near its intersection with MD 27, is a 160 space parking garage that is also open to monthly permit holders, as well as hourly users.

Main Street experiences serious congestion problems during the afternoon period. Vehicles stopped at the traffic signals along Main Street back-up past the side street intersections and limit access to Main Street. This results in congestion characteristic of and approaching gridlock. A significant number of trucks were noted turning left from northbound MD 27 to westbound Main Street. The entire block along MD 27 between Main Street and Green Street was frequently filled with vehicles, causing traffic to back up on Green Street, as well as Liberty Street as far as George Street. Traffic queued from the Main Street/MD 27 signal also backs up through the Longwell Avenue intersection, restricting opportunities for traffic to enter Main Street from Longwell Avenue when Longwell has the green signal phase.

Corridor Description - MD 27

The City of Westminster and the surrounding area are served by two primary north-south corridors: Maryland MD 27 and Maryland MD 97. These two corridors were studied in depth during this update of the *City of Westminster Comprehensive Plan* because of their significance with respect to commercial activity, as well as the flow of goods, materials, and people into, out of, and through the Westminster area.

There is not a significant section of MD 27 within the corporate limits of Westminster. However, it does provide a primary access to downtown Westminster from Maryland MD 140 as well as serving as the primary access to the Washington D.C. Metropolitan Area.

During the summer of 2002, the City partnered with the State of Maryland to develop the MD 27 Corridor Study. The primary objectives of that plan was to redevelop the MD Rotue 27 Corridor into the primary “Gateway” to downtown Westminster. One of the recommendations to implement this plan is to restrict truck traffic from using MD 27 through downtown Westminster. While impractical at this time, the City is cooperating with SHA and Carroll County to develop a strategy to provide an alternate truck traffic route which would restrict such traffic on MD 27.

By removing truck traffic from MD 27, the overall function of MD 27 would significantly improve. Subsequently, the traffic conditions along Main Street would also improve as there would be less truck/personal automobile conflicts at the busiest intersection in downtown Westminster.

Corridor Description - MD 97 (N)

The Maryland MD 97 (N) corridor immediately to the north of Maryland MD 140 is the site of prime industrial land in Westminster. The Carroll County Regional Airport is located in this area, as well as six industrial parks which have experienced moderate levels of development over the past several years.

Maryland MD 97 (N) also serves as a primary commuter route, connecting residents of northern Carroll County and southern Pennsylvania with employment destinations in Westminster and points to the south and east. During morning and evening rush hours, the volume of pass-through commuter traffic chokes the roadway, making it difficult for employees and clients of the industrial parks to safely make turning movements. This situation results in long queuing of vehicles at the signalized intersections.

A study completed in 1994 by Whitney, Bailey, Cox & Magnani (WBCM) for the Carroll County Industrial Development Authority indicated that traffic along Maryland MD 97 (N) is expected to increase dramatically by the year 2020. These increases will be the result of both additional through traffic and the generation of a greater number of trips from the industrial parks as they continue to develop, indicating a need for multiple lane additions along MD 97 (N).

As a result of the increasing needs along MD 97, City staff, in cooperation with SHA and Carroll County, will require two developers to be responsible for immediate mainline widening on MD 97(N). As future developments approach the City for development opportunity, they will also be required to make additional improvements to MD 97. The City will also make arrangements to consolidate the number of access points onto MD 97. To date, the planned closing of the Kriders Church Road will be complete once Meadow Branch Road is reconstructed. While impossible to eliminate all single source access points to MD 97(N), it is a priority to eventually eliminate as many as possible.

Because the Westminster By-pass was eliminated from the Consolidated Transportation Plan in 1999, mainline widening improvements to MD 97(N) are now even more critical as areas beyond Westminster continue to develop at a pace that further exacerbates the problems on the existing roadway.

Proposed Major Streets

The planned major streets for the City of Westminster are included on the Comprehensive Land Use Plan Map. The alignments of these proposed streets were evaluated with assistance from County Planning staff. Major street alignments that are located beyond, but in the vicinity of the City's corporate limits, are shown on the map for informational purposes. The proposed major streets, as well as streets deleted from the 1985 *Comprehensive Plan for Westminster and Environs*, are described below.

Ralph Street will be extended from Charles Street to South Center Street and widened from Greenwood Avenue to East Main Street. Beyond the corporate limits, the County has extended Ralph Street from Greenwood Avenue to Maryland MD 140. The MD 140

connection was part of the City and County Street Plan included in the 1985 *Comprehensive Plan for Westminster and Environs*.

A Mall Ring Road ramp is proposed from the MD 140/MD 27 exit ramp and is being incorporated on the Comprehensive Land Use Plan map to allow for future study.

Crossbridge Drive will be extended to Tahoma Farm Road. Continuation of Crossbridge Drive was incorporated into the City's Major Street Plan with adoption of the 1985 *Comprehensive Plan for Westminster and Environs*. The Crossbridge Drive bridge over Copp's Branch has been completed, and construction of the final segment will be accomplished in connection with the development of the adjacent commercial site.

Wyndtryst Drive is proposed to be extended to Maryland MD 140. This planned street between MD 97 and Meadow Branch Road was included in the adoption of the 1985 *Comprehensive Plan for Westminster and Environs*. The current proposed alignment reflects a modification to the 1985 alignment, so that the primary through movement is from MD 97 to MD 140 at the WMC Drive intersection, rather than the direct Wyndtryst-Thornbury-Meadow Branch Road connection shown on the 1985 plan. This change from the 1985 alignment reduces the number of stream crossings and environmental impacts.

Meadow Branch Road Reconstructed

Meadow Branch Road will serve as a major collector street for the connection between MD 97(N) and MD 140. Once reconstructed, the alignment will be shifted and vehicular traffic will move more efficiently as the radius of the turn towards MD 97 will be more gradual. This primary road will have very few direct connections to it from the Meadow Branch Industrial Park. The Bolton Hill development will have only a single access point which is the main entrance to the development. There will be no individual residential access points to Meadow Branch Road.

Business Parkway North is proposed to be extended to Old Meadow Branch Road. As the Air Business Center has developed, it has become apparent that an alternate means of access is necessary. Extension of Business Parkway North to Old Meadow Branch road will not affect any existing site development. This route will become a secondary means of ingress and egress for the industrial park to MD 97 at Old Meadow Branch Road. The installation of a traffic signal is ultimately anticipated at this intersection.

Tuc Road Realigned

The MD 27 Corridor Study recommended that Tuc Road be realigned near East Middle School to provide a safer environment for the school to eliminate traffic traveling directly in front of the school. If approved, the potential development of City owned land in and around the area could provide the necessary funding to complete this project. Tuc Road could be realigned so the road would no longer separate the parking lot from the school building.

Transportation Element of the Westminster Environs Community Comprehensive Plan

The Westminster and Environs Transportation Plan that is currently being reviewed by the Board of County Commissioners of Carroll County is an integral component of Westminster's transportation network. These planned local roads will provide an alternative to State roads that are more heavily traveled. City staff will work in close cooperation with County staff to ensure that the proposed road networks are in general conformance with the City of Westminster Comprehensive Plan.

Goals and Objectives

The following goals and objectives have been developed for Transportation.

Goal 1: Increase safety for all modes of transportation.

Objectives and recommended actions:

1. Improve pedestrian and bicycle safety through the construction of appropriate facilities and an educational program on their use.
 - a. Provide and maintain crosswalks in areas of high pedestrian traffic, especially in the downtown area and other activity centers.
 - b. Address special safety concerns at problem intersections through the adoption of regulations and/or facility improvements.
 - c. Place right-turn-on-red restrictions in the downtown area where there is significant pedestrian activity or where the buildings, because of limited setbacks, obscure sight distances.
 - d. Construct missing links in the Westminster sidewalk system.
 - e. Encourage the county and/or the Maryland State Highway Administration to construct sidewalks in developed areas on the outskirts of Westminster.
 - f. Encourage the County to require sidewalk construction as a part of all new development in the Westminster Community Planning Area.
 - g. Mitigate pedestrian barriers such as Maryland MD 140 by providing safe pedestrian and bicycle crossing locations.

- h. Develop an instructional program for discussing pedestrian and bicycle safety in local schools and in the Drivers Education curriculum.
 - i. Develop, sign, mark, and publicize a detailed pedestrian and bicycle route structure within the City of Westminster and the Westminster Community Planning Area.
 - j. Include pedestrian and bicycle educational programs each year as part of Alternative Transportation Week.
 - k. Develop a Walk Westminster brochure to assist in the education process and encourage pedestrian travel.
 - l. Designate bicycle lanes and develop bicycle routes to connect activity centers.
 - m. Continue the development of Greenways.
2. Improve the safety of vehicular travel.
- a. Support strict enforcement of all traffic laws, especially those relating to drug and alcohol use.
 - b. Construct additional facilities or improvements as needed to improve safety at candidate safety improvement locations.
 - c. Coordinate traffic signals along major roads to reduce the impatience factor in drivers, increase roadway capacity, and reduce fuel consumption and air emissions.
 - d. Seek the passage of State legislation to authorize the County to utilize Red Light Running Camera technology and establish a safety program with which the City could be a participant.
 - e. Provide for the separation of truck and vehicular traffic where appropriate and possible. In particular, evaluate the feasibility for restrictions on through truck traffic in downtown Westminster, and determine an alternate route for truck traffic that uses Maryland MD 27.
 - f. Require inter-parcel connections on subdivision roads.

- g. Request that the Maryland State Highway Administration extend the Maryland 140 access control study north to the juncture of the proposed Maryland 140 Bypass with existing Maryland 140.

Goal 2: Improve and maintain the existing transportation infrastructure.

Objectives and recommended actions:

- 1. Propose and pursue the construction of new facilities where they are warranted by traffic volumes and/or safety issues.
 - a. Continue to review transportation infrastructure projects for inclusion in the City's Capital Improvements Program.
 - b. Work with Carroll County and the Maryland State Highway Administration (SHA) to define needed improvements.
 - c. Coordinate construction with Carroll County and SHA as appropriate.
 - d. Pursue construction of the proposed major streets shown on the Comprehensive Plan Land Use Map and described in the *Transportation* chapter through public and/or private funding.
 - e. Support construction of the roads delineated in the Westminster and Environs Transportation Plan.
 - f. Provide direction for which improvements to MD 140 are most appropriate at the intersections of Malcolm Drive, Center Street and Englar Road.
 - g. Pursue an aggressive access control policy in the MD 140 corridor through the development review process.
 - h. Limit access to Maryland Routes 27, 31, 32, and 97, in a manner similar to the access plan prepared for Maryland MD 140 by the State Highway Administration.
 - i. Support and when available, privately fund the necessary improvements to Maryland MD 97(N) so that this roadway will continue to function properly.

- j. Add a short left turn phase to the signal at Longwell Avenue and Main Street to facilitate turning movements from eastbound Main Street to northbound Longwell Avenue.
 - k. Reconfigure the intersection of John and Carroll Streets with Englar Road to make the John Street/Englar Road connection the through movement. Evaluate the need for a left turn arrow from southbound John Street to eastbound Main Street to accommodate the resulting increase in traffic flow along this route.
 - l. Consider improvements and study alternatives for improving the intersection of West Main and Carroll Streets.
 - m. Reconfigure the alignment of Tuc Road and Longwell Avenue to avoid conflicts with school children and vehicles.
2. Provide maintenance of the road network.
- a. Continue to review transportation infrastructure maintenance projects for inclusion in the City's Capital Improvements Program.
 - b. Continue to fund the street overlay program in the City's Capital Improvements Program for the regular maintenance of the City's streets and roads.
3. Enhance the appearance of transportation infrastructure.
- a. Continue the City's street tree planting program.
 - b. Develop a set of sign guidelines for implementation in the City and the Community Planning Area. Coordinate this effort with SHA and the Carroll County Department of Planning.
 - c. Continue to apply regulations and standards to reduce sign clutter consistently along all streets and roadways.
 - d. Coordinate with Carroll County to provide for a consistent development pattern along Maryland MD 140 in the Westminster area.
 - e. Encourage the redevelopment of MD 27 to create a primary "Gateway" to downtown Westminster.

4. Explore additional uses for Intelligent Transportation Systems (ITS).
 - a. Educate local agencies regarding the uses of ITS.
 - b. Maintain the new interconnected signal system along Maryland 140 and include, as part of the system, additional signals as they are installed at either end.
 - c. Coordinate with SHA and Carroll County to implement ITS projects in the Westminster Community Planning Area.

Goal 3: Support alternate modes of transportation in order to reduce vehicle trips.

Objectives and recommended actions:

1. Encourage additional opportunities for alternate modes of transportation for residents traveling within the City and the Community Planning Area.
 - a. Encourage commuters to carpool and vanpool.
 - b. Provide information on the Carroll County commuter assistance service.
 - c. Coordinate with the State and County for the development of Park-and-Ride lots.
 - d. Study opportunities for providing alternate modes of transportation for commuters.
 - e. Explore services which will reduce the number of single occupancy vehicles on the roads.
 - f. Complete the actions which address pedestrian and bicycle safety.
 - h. Study further the establishment of a Greater Westminster Area Transit Service as recommended by the MD 27 Gateway Plan and the Lower Pennsylvania Avenue Task Force.

2. Support alternative modes of transportation for use by the business community.
 - a. Development in the vicinity of the airport should be compatible with flight patterns and noise zones.
 - b. Pursue the development of a railroad spur to the airport industrial area.
 - c. Support efforts to increase the use of the area's rail system.
3. Consider the establishment of an intermodal transit center in the downtown area.
 - a. Study a possible local shuttle route connecting the downtown to shopping and employment opportunities on the City's outskirts as recommended by the Lower Pennsylvania Avenue Task Force.
 - b. Study the feasibility of locating a transfer station in the downtown area that would link auto, pedestrian, and shuttle travel as recommended by the MD 27 Gateway Corridor Study.
 - c. Consider existing transit services, such as CATS, for operation of a local shuttle route.

Goal 4: Reduce the need for long commuter trips in and around Westminster.

1. Encourage the use of telecommunications to reduce commuter traffic.
 - a. Work with the Baltimore Metropolitan Council, the Carroll County Department of Economic Development, and the Carroll County Department of Planning to establish a telecommuting center in Westminster.
 - b. Clarify language in the Zoning Ordinance to address the home offices of telecommuters.
2. Increase employment opportunities in a variety of employment sectors in the Westminster area.